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October 25, 1999

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EXECUTIVE SECRETARY

VIA HAND DELIVERY

David Waddell, Executive Secretary  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37238

Re: *Petition for Arbitration of ITC^DeltaCom Communications, Inc. with BellSouth Telecommunications, Inc. pursuant to the Telecommunications Act of 1996*  
Docket No. 99-00430

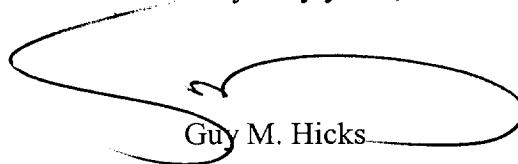
Dear Mr. Waddell:

Enclosed are the original and thirteen copies of rebuttal testimony on behalf of BellSouth Telecommunications, Inc.:

David A. Coon  
Keith Milner  
Alphonso J. Varner  
William Taylor  
Ronald M. Pate  
Daonne Caldwell

Copies of the enclosed are being provided to counsel of record for all parties.

Very truly yours,



Guy M. Hicks

GMH:ch  
Enclosure

FILE

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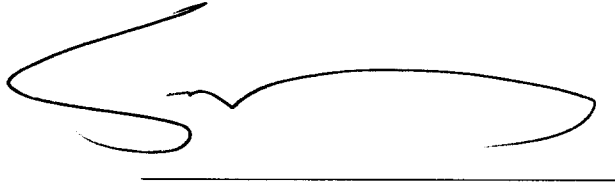
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**FILE**

BEFORE THE  
TENNESSEE REGULATORY AUTHORITY

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99 OCT 25 PM 3 49

EXECUTIVE SECRETARY

IN RE:	)	
PETITION FOR ARBITRATION OF ITC^DELTACOM	)	
COMMUNICATIONS, INC. WITH BELL SOUTH	)	DOCKET NO. 99-00430
TELECOMMUNICATIONS, INC. PURSUANT TO	)	
THE TELECOMMUNICATIONS ACT OF 1996	)	

**REBUTTAL TESTIMONY**

**OF**

**WILLIAM E. TAYLOR, Ph.D.**

**ON BEHALF OF**

**BELL SOUTH TELECOMMUNICATIONS, INC.**

**OCTOBER 25, 1999**

## **REBUTTAL TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.**

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**ON BEHALF OF BELL SOUTH TELECOMMUNICATIONS, INC.**

**REBUTTAL TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.**

**BEFORE THE TENNESSEE REGULATORY AUTHORITY**

**DOCKET NO. 99-00430**

**OCTOBER 25, 1999**

**I. INTRODUCTION AND SUMMARY**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.**

A. My name is William E. Taylor. I am Senior Vice President of National Economic Research Associates, Inc. ("NERA"), head of its Communications Practice, and head of its Cambridge office located at One Main Street, Cambridge, Massachusetts 02142.

**Q. HAVE YOU FILED TESTIMONY PREVIOUSLY IN THIS PROCEEDING?**

A. Yes, I filed direct testimony in this proceeding on October 15, 1999.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. I have been asked by BellSouth Telecommunications, Inc. ("BellSouth")—an incumbent local exchange carrier ("ILEC")—to address economic and regulatory issues raised in this proceeding to arbitrate an interconnection agreement between BellSouth and ITC^Deltacom Communications, Inc. ("ITC^DeltaCom")—a competitive local exchange carrier ("CLEC"). Specifically, I respond to testimony from ITC^DeltaCom witnesses Don J. Wood and Christopher J. Rozycki. The issues in question include: (1) reciprocal compensation for traffic sent to Internet service providers ("ISPs"), (2) non-recurring charges ("NRCs") for BellSouth's operations support systems ("OSS"), and (3) performance guarantees.

1    **II.    INTER-CARRIER COMPENSATION FOR ISP-BOUND CALLS**

2    **Issue 3(1):    Should BellSouth be required to pay reciprocal compensation to**  
3                    **ITC^DeltaCom for all calls that are properly routed over local trunks,**  
4                    **including calls to Information Service Providers (“ISPs”)?**

5    **Q.    HOW DOES YOUR POSITION ON INTER-CARRIER COMPENSATION FOR**  
6           **ISP-BOUND TRAFFIC DIFFER FROM THAT OF ITC^DELTACOM**  
7           **WITNESSES?**

8    A.    Contrary to the position of ITC^DeltaCom witnesses, my position is that reciprocal  
9           compensation should *not* be paid for ISP-bound calls. While reciprocal compensation is  
10          the proper form of inter-carrier compensation for local calls originated (on behalf of its  
11          customers) by one carrier and terminated (to its customers) by another carrier, it is *not* so if  
12          calls to Internet destinations originated by the first carrier are switched by the second  
13          carrier to an ISP which then routes those calls through the Internet’s backbone network to  
14          their destination. Even though local calls and ISP-bound calls may *resemble* each other at  
15          a functional level, they are not the same in two fundamental respects: (1) the cost per  
16          minute to carry each type of call, on average, is not the same, and (2) the pattern of cost  
17          causation for the two types of calls is different and, therefore, requires different modes of  
18          cost recovery (compensation).

19          The Federal Communications Commission (“FCC”) has ruled that ISP-bound calls are  
20          *jurisdictionally* mixed and mostly interstate.<sup>1</sup> As long as those calls are not local from a  
21          jurisdictional standpoint, they cannot be subject to reciprocal compensation, the form of  
22          inter-carrier compensation that applies to local traffic only. However, there is also a  
23          compelling *economic* basis for seeking an alternative form of inter-carrier compensation  
24          for ISP-bound calls. That is, even without the FCC’s jurisdictional distinctions, one need  
25          only appreciate the incontrovertible fact that cost is caused differently for Internet traffic

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<sup>1</sup> FCC, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Inter-Carrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98 and 99-68, Declaratory Ruling in CC Docket No. 96-98 and Notice of Proposed Rulemaking in CC Docket No. 99-68 (“Internet Traffic Order”), released February 26, 1999.

1 than for local traffic and, therefore, should be recovered differently. There is, in fact, a  
2 strong parallel between how cost is caused when an ILEC subscriber places a long distance  
3 call over the network of an inter-exchange carrier ("IXC") and the cost caused when that  
4 same subscriber places an Internet call over the network of an ISP. The salient fact is that  
5 the ISP is a carrier that facilitates access to the Internet just as the IXC facilitates long  
6 distance "access" to another telephone subscriber at a distant location. The ISP is (like the  
7 IXC) *not* an end-user of any local exchange carrier (such as a CLEC) that serves it.  
8 Therefore, just as the IXC compensates all local carriers for partial carriage of long  
9 distance calls through switched access charges, so too should the ISP compensate all local  
10 carriers (including both the ILEC and the CLEC) for partial carriage (within the circuit-  
11 switched network) of Internet calls through analogous charges. Under this model of  
12 compensation, the cost-causing Internet customer (who is also a subscriber of the ILEC)  
13 pays for the entire cost of the Internet call to the ISP that provides Internet access, and that  
14 ISP in turn compensates the ILEC and the CLEC for all costs incurred on the ISP's behalf.

15 The proper form of inter-carrier compensation depends on how cost is caused, not on  
16 whether ISP-bound calls are functionally equivalent to local calls or whether they cost the  
17 same to carry. The greatest danger in failing to make this distinction is to create a set of  
18 perverse incentives under which the carrier *receiving* reciprocal compensation for ISP-  
19 bound calls (e.g., the CLEC) finds it increasingly profitable to specialize in carrying only  
20 ISP-bound traffic. As regulators in Massachusetts have already recognized, this creates  
21 opportunities for uneconomic arbitrage and entry solely to serve ISPs and collect reciprocal  
22 compensation payments. As I indicated in my direct testimony, the result is a subsidy to  
23 Internet services and insufficient offerings of—and competition for—the full slate of local  
24 exchange services. The overall economic effect on society is, therefore, clearly  
25 detrimental.

26 **Q. MR. ROZYCKI STATES [AT 18] ITC^DELTACOM'S POSITION THAT**  
27 **RECIPROCAL COMPENSATION SHOULD BE CONTINUED TO BE PAID FOR**  
28 **ISP-BOUND CALLS. DO YOU AGREE?**

29 **A.** No, for the two reasons mentioned above. ITC^DeltaCom's position on this issue is

1 clearly inconsistent with the FCC's analysis of the jurisdictional status of ISP-bound calls.  
2 More importantly, it is inconsistent with the fundamental economic principle that cost  
3 should be recovered from those who cause that cost: in the present instance,  
4 ITC^DeltaCom should recover its costs from the ISP it serves and, indirectly, that ISP's  
5 customers who are the true cost-causers.

6 **Q. IN YOUR DIRECT TESTIMONY [AT 8-9 AND FIGURE 1], YOU EXPLAINED**  
7 **WHY ITC^DELTACOM'S VIEW THAT ISP-BOUND CALLS ARE ALL**  
8 **JURISDICTIONALLY LOCAL IS ERRONEOUS. PLEASE INDICATE HOW**  
9 **THIS ERRONEOUS VIEW IS MANIFEST IN MR. ROZYCKI'S TESTIMONY.**

10 A. In my direct testimony, I explained that ITC^DeltaCom's erroneous view of inter-carrier  
11 compensation for ISP-bound calls is based on two crucial assumptions.

- 12 1. The ILEC subscriber that calls the Internet is acting as a customer of the originating  
13 ILEC,<sup>2</sup> even when the call goes through the ISP to which it pays monthly access fees.
- 14 2. The ISP itself is an end-user (not a carrier) of the CLEC and the Internet call  
15 "terminates" at the ISP.

16 These assumptions are epitomized by two assertions by Mr. Rozycki:

17 BellSouth's proposal [about reciprocal compensation] discriminates ... [by  
18 denying] ... ITC^DeltaCom the ability to recover its costs for terminating local  
19 calls for BellSouth.<sup>3</sup>

20 and

21 The ISP pays for its local phone line, just as any user or receiver of telephone  
22 calls.<sup>4</sup>

23 The first statement confirms ITC^DeltaCom's view that the cost of an ISP-bound call made  
24 by the ILEC's subscriber must be recovered from the ILEC. The second statement reflects  
25 ITC^DeltaCom's view that an ISP is akin to all end-users. Mr. Rozycki also rules out [at  
26 24] the recovery of any other cost associated with carriage of an ISP-bound call from the

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<sup>2</sup> Recall the distinction I made in my direct testimony [fn. 7] between a "subscriber" and a "customer" in order to show cost causation.

<sup>3</sup> Direct testimony of Christopher J. Rozycki, at 18-19.

<sup>4</sup> *Id.*, at 24.



1 ISP.

2 **Q. HOW DO YOU RESPOND TO MR. ROZYCKI'S BELIEF [AT 23-24] THAT THE**  
3 **CALLING PARTY SHOULD PAY FOR AN ISP-BOUND CALL?**

4 A. I agree that the calling party (here, the ISP customer) should pay for the ISP-bound call.  
5 But that does not logically translate into the requirement that *BellSouth* (whose subscriber  
6 happens to be the ISP's customer) should pay part or all of the cost of that call. Instead,  
7 from the cost-causative standpoint explained above, the ISP itself and its customer (the true  
8 calling party) should pay all facilitating carriers (the ILEC and the CLEC alike) for the ISP-  
9 bound call. This is exactly the situation when the ILEC's subscriber makes a long distance  
10 call. The costs incurred by ILECs and/or CLECs to carry that call to and from the IXC's  
11 network are recovered from the IXC and its long distance customer, not from the carriers  
12 that provide access.

13 **Q. IS MR. ROZYCKI CONSISTENT IN HIS OWN VIEW ABOUT REQUIRING THE**  
14 **CALLING PARTY TO PAY?**

15 A. Ironically, no. Mr. Rozycki draws a parallel [at 24] between long distance calls and  
16 Internet calls, and concludes that each carrier facilitating the carriage of those calls should  
17 be compensated. For example, Mr. Rozycki states:

18 Calls to the Internet are similar [to long distance calls] in that there are multiple  
19 parts to each Internet session. Assuming the call is initiated over standard phone  
20 lines, the initial part of the call, its delivery to the ... ISP, may be handled by one  
21 or more carriers. Each of these carriers plays a roll (sic) in delivering the call to  
22 its destination, and as such, *each should be compensated*. [emphasis added]

23 This opinion reflects both ambivalence and a confused understanding of a "call." Mr.  
24 Rozycki appears to conclude, correctly in my opinion, that facilitating carriers should be  
25 compensated by those who cause costs. This would fit perfectly with the cost-causative  
26 view of compensation that I explained above. Nothing in his statement above, however,  
27 provides any logical reason to seek compensation *from* the ILEC (or BellSouth). Instead, it  
28 eloquently makes the case for payment to be made *to* the ILEC (or BellSouth). The rest of  
29 Mr. Rozycki's testimony, however, does not square with this statement.

30 Mr. Rozycki's attempt to break a call down into its parts (based on which carrier is

conveying the call at any given point) may be useful for understanding the network configuration that underlies the call, but it says nothing about how the *cost* of the call should be recovered. Instead, understanding the parts helps primarily in determining which carriers participate in the carriage of the call and would, therefore, need to be compensated. For purposes of determining the full cost caused by the calling party, however, it is necessary to view the call from end to end, rather than in its intermediate stages. That is why the FCC declined to view the Internet call in terms of its parts. Instead, in reaching the judgment that Internet calls are generally interstate in nature, the FCC viewed such calls from end to end.

**Q. MR. ROZYCKI CLAIMS [AT 18] THAT “IN ESSENCE, BELLSOUTH HAS TOLD ITC^DELTACOM THAT [ITC^DELTACOM] MUST PROVIDE [BELLSOUTH] FREE USE OF [ITC^DELTACOM’S] NETWORK FOR ALL CALLS TO THE INTERNET.” IS THIS TRUE?**

A. Absolutely not. Quite the contrary, BellSouth does not deny ITC^DeltaCom compensation for the costs it incurs to handle ISP-bound calls. Instead, BellSouth’s position, correctly based on cost causation, is that the costs in question should be recovered from the ISP and, indirectly, the ISP customer, rather than from BellSouth or any other carrier facilitating ISP-bound calls.

**Q. MR. ROZYCKI CONCLUDES [AT 25] THAT BELLSOUTH’S REFUSAL TO “NEGOTIATE A FAIR PRICE” FOR THE HANDLING OF ISP-BOUND CALLS, IN EFFECT, HOLDS ITC^DELTACOM HOSTAGE BECAUSE ANY FAILURE BY ITC^DELTACOM TO CONTINUE CURRENT TERMS AND CONDITIONS TO THE ISPs IT SERVES WOULD “DRIVE” THOSE ISPs BACK TO BELLSOUTH. IS THAT CONCLUSION CORRECT?**

A. No. Mr. Rozycki’s conclusion is based on the illusion that the current situation—in which BellSouth is paying reciprocal compensation to ITC^DeltaCom for ISP-bound calls—is economically efficient or socially desirable. Far from it, as I have explained, the payment of such compensation subsidizes Internet calling and distorts local exchange competition.

1 If the cessation of reciprocal compensation were to force ITC^DeltaCom and other CLECs  
2 to provide their services to ISPs at cost-based, rather than subsidized, prices, then fair  
3 competition (for the business of ISPs) would be restored. CLECs that are thriving  
4 currently on a reciprocal compensation-driven strategy of ISP-specialization would then  
5 have to abandon those arbitrage opportunities and compete on fair and cost-based terms for  
6 the *full* range of network services offered by an ILEC like BellSouth. Such an outcome  
7 would clearly be in the public interest and consistent with the goals of the  
8 Telecommunications Act of 1996 ("1996 Act").

### 9 **III. CHARGES FOR OPERATIONS SUPPORT SYSTEMS**

10 **Issue 2; 2(a)(iv); 2(b)(I) and 6(a) combined as follows:**

11 **(a) What is the definition of parity?**

12 **(b) Pursuant to this definition, should BellSouth be required to provide the**  
13 **following and if so, under what conditions and at what rates:**

14 **(1) Operational Support Systems ("OSS")**

15 **(2) UNEs**

16 **(3) Access to Numbering resources**

17 **(4) An unbundled loop using Integrated Digital Loop Carrier ("IDLC")**  
18 **technology; and**

19 **(5) Priority guidelines for repair and maintenance and UNE**  
20 **provisioning?**

21 **Q. MR. WOOD DISTINGUISHES [AT 12-13] BETWEEN OSS DEVELOPMENT AND**  
22 **OSS USE COSTS. IS THERE A RELATIONSHIP BETWEEN THOSE COSTS, OR**  
23 **ARE THEY TOTALLY INDEPENDENT?**

24 **A.** As I explained in my direct testimony [at 27-28], even though the two costs are different in  
25 nature, they may still be related through an important economic trade-off. The level of  
26 technology embodied in an OSS is not fixed in the long run. OSS that employ more capital  
27 but less labor tend to have higher OSS *development* and lower OSS *use* costs, and those

1 that employ less capital and more labor tend to have lower development and higher use  
2 costs. This inverse relationship between OSS development and OSS use costs is thus a  
3 product of the type of OSS installed.

4 **Q. MR. WOOD SUGGESTS [AT 12] THAT OSS DEVELOPMENT COSTS (WHICH**  
5 **HE LABELS “TRANSITION COSTS”) MAY NOT BE RECOVERED BY**  
6 **BELLSOUTH FROM OSS-REQUESTING CARRIERS. HAS EITHER THE 1996**  
7 **ACT OR THE FCC LIMITED RECOVERY TO SOME, BUT NOT ALL, OSS-**  
8 **RELATED COSTS?**

9 A. No. The 1996 Act makes no specific mention of OSS. In its implementing rules, the FCC  
10 has declared that OSS be treated just like any UNE. The FCC has never specifically  
11 limited recovery to some, but not all, OSS-related costs. From this, I conclude that the  
12 FCC has intended all along that the provider of OSS should be able to recover *all* costs  
13 related to the development and use of OSS. As explained above, these costs include both  
14 one-time and ongoing costs.<sup>5</sup>

15 **Q. MR. WOOD FURTHER ASSERTS [AT 13] THAT OSS DEVELOPMENT COSTS**  
16 **ARISE FROM THE 1996 ACT’S REQUIREMENT THAT LOCAL EXCHANGE**  
17 **MARKETS BE OPENED TO COMPETITION AND SHOULD, THEREFORE,**  
18 **HAVE TO BE ABSORBED BY INCUMBENT CARRIERS LIKE BELLSOUTH.**  
19 **DO YOU AGREE?**

20 A. No. The notion proffered by Mr. Wood that by writing the Act, *Congress* caused OSS  
21 development costs is incorrect as a matter of regulatory economics. In  
22 telecommunications, regulatory bodies have frequently required regulated firms to  
23 undertake costly investments that are subsequently recovered from the customers who use  
24 the facilities. For example, when classified as a dominant firm, AT&T was required to  
25 maintain sufficient capacity to provide long distance service to any customer in the U.S. at

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<sup>5</sup> In its Interim Order in Docket No. 97-01262, the Authority permitted the recovery of OSS-related costs through a recurring rate assessed to all carriers (i.e., ILEC and CLEC alike). The Authority also ordered that all expenses associated with electronic interfaces be capitalized and recovered over the life of the OSS.

1 geographically averaged rates. Arguably, some costs would be incurred even if no  
2 customer demand materialized. Nonetheless, AT&T's capacity costs were recovered—on  
3 a usage basis—in its retail prices charged to its own end-users, not from  
4 telecommunications users in general.

5 **Q. DO YOU AGREE WITH MR. WOOD'S BELIEF [AT 13] THAT ANY EFFORT BY**  
6 **BELLSOUTH TO IMPROVE ITS OSS WILL EVENTUALLY IMPROVE ITS**  
7 **OWN EFFICIENCY AND BENEFIT ITS OWN CUSTOMERS?**

8 A. No, I disagree with Mr. Wood's implication that BellSouth's customers will benefit from  
9 OSS development requested by CLECs and that, therefore, the cost of such development  
10 ought to be absorbed by BellSouth. First, Mr. Wood ignores the fact that the OSS  
11 development costs at issue here pertain *solely* to the interfaces and systems that BellSouth  
12 has developed to serve CLECs like ITC^DeltaCom.<sup>6</sup> Therefore, Mr. Wood errs in at least  
13 three respects. First, he confuses OSS development costs to serve CLECs with those  
14 BellSouth incurs to serve its own customers. Second, he ignores cost causation: even if  
15 BellSouth's customers were somehow to benefit—which they do not—from BellSouth's  
16 development of OSS interfaces for ITC^DeltaCom or other CLECs, it would be improper  
17 to ignore the basic underlying fact that ITC^DeltaCom and other CLECs remain the cost  
18 causers from whom cost should be recovered. Third, benefits are never the economically  
19 proper basis for pricing or cost recovery. A price is charged to recover a cost, never to  
20 "tax" a benefit.

21 **Q. DO YOU AGREE WITH MR. WOOD'S CONTENTION [AT 14 AND FN. 4] THAT**  
22 **MAKING CLECs LIKE ITC^DELTACOM PAY FOR THEIR OWN OSS**  
23 **DEVELOPMENT AND USE COSTS AS WELL AS BELLSOUTH'S OSS COSTS**  
24 **WOULD CONFER A SUBSTANTIAL COMPETITIVE ADVANTAGE ON**  
25 **BELLSOUTH AND DISCOURAGE ANY LOCAL COMPETITION?**

26 A. No. If what Mr. Wood claims were true, then I would agree. But, as stated above, Mr.

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<sup>6</sup> Direct testimony of Alphonso J. Varner in this proceeding.

1 Wood fails to distinguish between OSS-related costs (such as for interfaces and related  
2 systems) attributable to CLECs like ITC^DeltaCom and BellSouth's own OSS costs. This  
3 failure alone invalidates his contention. In addition, Mr. Wood overlooks the fact that the  
4 OSS that BellSouth uses to serve its retail customers are already in place. BellSouth does  
5 not recover the costs associated with its own OSS by charges to other carriers, as it  
6 would—and should—for OSS-related costs caused by those other carriers. Instead,  
7 BellSouth recovers its own OSS-related costs through its retail prices, and has been doing  
8 so all along.

9 Contrary to Mr. Wood's view, making BellSouth pay for OSS development costs  
10 caused by CLECs would not only confer a substantial competitive advantage *on the*  
11 *CLECs*, it would encourage CLECs to demand OSS from BellSouth in excessive quality  
12 and quantity. As I explained earlier, because of the economic trade-off between OSS  
13 development costs and OSS use costs, this would allow CLECs to artificially lower their  
14 costs and would encourage entry by relatively inefficient competitors. Thus, society would  
15 be worse off under such an arrangement even as the CLECs are able to harness an  
16 unjustified private gain for themselves.

17 **Q. SHOULD BELL SOUTH BE MADE TO RECOVER OSS DEVELOPMENT COSTS**  
18 **INCURRED ON BEHALF OF CLECs LIKE ITC^DELTACOM FROM ITS OWN**  
19 **RETAIL CUSTOMERS?**

20 A. No. In competitive markets, firms recover costs from the customers who cause the costs.  
21 For example, AT&T, MCI WorldCom, and Sprint recover the OSS costs they incur to  
22 serve resellers from the recurring and non-recurring prices they charge those resellers, not  
23 from their retail customers. Were they to attempt to raise retail prices to subsidize their  
24 wholesale customers, they would face two insurmountable problems:

- 25 1. a competitive handicap in the retail market because other equally efficient facilities-  
26 based carriers could underprice them, and
- 27 2. an inefficient margin between the prices of their resold services and of their retail  
28 services such that an equally efficient reseller could underprice them.

29 In any event, this issue is now moot in light of the Authority's acceptance of the principle  
30 that OSS development costs should be recovered from OSS-requesting carriers.

1 **Q. DO YOU AGREE WITH MR. WOOD'S RECOMMENDATION [AT 16] THAT IN**  
2 **ORDER TO ASSURE CLECs NON-DISCRIMINATORY ACCESS TO OSS, THE**  
3 **OSS DEVELOPMENT COSTS SHOULD, AT THE VERY LEAST, BE**  
4 **RECOVERED IN A "COMPETITIVELY NEUTRAL" MANNER FROM ALL**  
5 **RETAIL CUSTOMERS, REGARDLESS OF THEIR LOCAL SERVICE**  
6 **PROVIDER?**

7 A. No. Mr. Wood begins by asserting—correctly, in my opinion—that competitively neutral  
8 recovery of OSS development costs occurs when each carrier is held fully responsible for  
9 “its own OSS.” Mr. Wood’s assertion, however, is incomplete; I would add that each  
10 carrier should be responsible for the OSS costs (both development and use-related) that it  
11 *causes*. Under that principle, cost causation would be respected, and cost recovery would  
12 be economically efficient. However, in light of the general tenor of Mr. Wood’s testimony,  
13 I interpret his assertion to mean that the OSS development costs incurred by BellSouth to  
14 serve ITC^DeltaCom’s needs should be BellSouth’s alone to bear. As I explained earlier,  
15 that is an unacceptable conclusion from the standpoint of standard economic theory.  
16 Were this Authority to decide that BellSouth’s OSS development costs arising from having  
17 to serve ITC^DeltaCom (or other carriers) should not be recovered by BellSouth alone, Mr.  
18 Wood asks that those costs be recovered equally from *every* retail customer in the local  
19 service market.<sup>7</sup> In other words, Mr. Wood recommends the use of a surcharge on *all* local  
20 access lines (regardless of which carriers provide them) for recovery of the OSS  
21 development costs borne by BellSouth on behalf of ITC^DeltaCom and other carriers.  
22 This, too, is unacceptable from the standpoint of economic theory.

23 OSS development costs incurred on behalf of ITC^DeltaCom or other carriers is a  
24 fixed cost that must be recovered from the CLECs that caused them. Failure to do so  
25 would only create a subsidy for ITC^DeltaCom or other carriers, and the creation of any  
26 new subsidy would be bad public policy. The 1996 Act clearly intended to eliminate  
27 implicit subsidy flows and to extend competition into the local and long distance markets.

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<sup>7</sup> A similar view is expressed by Mr. Rozycki at page 14 of his testimony.

1 Competition that depends on a flow of subsidy to survive in a market is inefficient and not  
2 worth having, in the sense that Tennessee customers would not benefit from such  
3 competition in terms of price and service quality.

4 Nonetheless, even if it were (incorrectly) determined that any of the services  
5 provided to CLECs should be subsidized, funding that subsidy by a charge proportional to  
6 the number of lines served would not be competitively neutral. First, that would assign the  
7 bulk of the OSS development costs to BellSouth itself, at least in the early years of local  
8 competition when BellSouth would serve the overwhelming majority of local access lines  
9 in its service area and when those OSS development costs could be substantial. Second,  
10 any assessment on access lines would not be competitively neutral unless all competitors  
11 (incumbents and entrants alike) could pass that (per-line) charge through to customers on a  
12 flat-rated basis if they so chose. Only such flat-rate recovery would match the recovery of  
13 fixed costs and would ensure that all end-users pay the same fixed contribution toward the  
14 wholesale subsidy, regardless of the carrier from which they take their local service. Even  
15 then, the competitive playing field would not be level because BellSouth's *wholesale* OSS  
16 services would still be receiving a subsidy from BellSouth's retail customers, which would  
17 give an advantage to those CLECs that use BellSouth's OSS to compete against  
18 BellSouth's retail services.

19 If flat-rate recovery from end-users is also ruled out, then it would be more efficient  
20 to assess all carriers in proportion to their OSS *transactions* rather than in proportion to  
21 access lines because OSS transactions are more likely to be closely linked to the OSS costs  
22 in question. Customers that place no demands on OSS should not—to the extent  
23 possible—have to pay for OSS development and use costs.

24 **Q. MR. WOOD WORRIES [AT 9] THAT “EXCESSIVE OR UNNECESSARY NRCs**  
25 **INHERENTLY CONSTITUTE BARRIERS TO COMPETITION.” IS HIS**  
26 **WORRY JUSTIFIED IN THE CONTEXT OF THE NRCs FILED BY BELL SOUTH**  
27 **IN THIS PROCEEDING TO RECOVER OSS-RELATED COSTS?**

28 A. No. While as a general proposition, I would agree with Mr. Wood that any “excessive or  
29 unnecessary” charge that raised a competitor's cost asymmetrically could constitute a



1 barrier to entry, his application of that proposition to the context described is unjustified.  
2 NRCs cannot be a barrier to entry as long as two fundamental principles are observed: (1)  
3 the true cost causer is assessed the NRCs for the purpose of recovering costs caused  
4 directly by it, and (2) NRCs are set, as I discussed earlier, on the basis of a forward-looking  
5 pricing methodology. In the current context, NRCs should be assessed to ITC^DeltaCom  
6 and other OSS-requesting carriers on the basis of the forward-looking OSS development  
7 and use costs caused by those carriers. Those NRCs would, of course, exclude OSS-related  
8 costs arising from BellSouth's own needs for OSS to serve its retail customers.

9 **Q. MR. WOOD TAKES ISSUE [AT 10] WITH BELL SOUTH'S OSS COST STUDY**  
10 **BECAUSE IT ALLEGEDLY REFLECTS BELL SOUTH'S "EXISTING**  
11 **SYSTEMS," WHICH, HE CLAIMS, PROVIDES NO INCENTIVE TO**  
12 **BELL SOUTH TO SUPPLY OSS CAPABILITIES "EFFICIENTLY AND IN A**  
13 **NON-DISCRIMINATORY MANNER." DO YOU AGREE?**

14 A. No. Mr. Wood appears to be advocating the use of a hypothetical network (one BellSouth  
15 is never likely to have or build toward) for the purpose of calculating forward-looking  
16 OSS-related costs. This is exactly the standard that the FCC rejected in explaining how  
17 total element long run incremental cost ("TELRIC")—the forward-looking cost measure  
18 for a UNE—should be estimated. First, the FCC noted:

19 [f]orward-looking cost methodologies, like TELRIC, are intended to consider  
20 the costs that a carrier would incur in the future. Thus, a question arises whether  
21 costs should be computed based on the least-cost, most efficient network  
22 configuration and technology currently available, or whether forward-looking  
23 cost should be computed based on incumbent LECs' existing network  
24 infrastructures ... The record indicates three general approaches to this issue.  
25 Under the first approach, the forward-looking economic cost for ... unbundled  
26 elements would be based on the most efficient network architecture, sizing,  
27 technology, and operating decisions that are operationally feasible and currently  
28 available to the industry.<sup>8</sup>

29 The FCC, however, rejected this standard because:

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<sup>8</sup> Local Competition Order, ¶683.

1       this approach may ... discourage facilities-based competition by new entrants  
2       because new entrants can use the incumbent LEC's existing network based on  
3       the cost of a hypothetical least-cost, most efficient network.<sup>9</sup>

4       Instead, the FCC adopted a third approach that calculates costs using the most efficient  
5       technology *actually deployed* in the incumbent carrier's current wire centers:<sup>10</sup>

6       prices for ... access to unbundled elements would be developed from a forward-  
7       looking economic cost methodology based on the most efficient technology  
8       *deployed* in the incumbent LEC's current wire center locations.<sup>11</sup>

9       The FCC explained its choice of a standard for calculating costs thus:

10       [t]his benchmark of forward-looking cost and existing network design most  
11       closely represents the incremental costs that incumbents actually expect to incur  
12       in making network elements available to new entrants ....<sup>12</sup>

13       This standard is, in fact, close to the economic standard for setting efficient prices. Thus,  
14       costs calculated according to the FCC's meaning for TELRIC should reflect the costs that  
15       efficiently-functioning ILECs actually expect to incur on a going forward basis. In  
16       particular, according to the FCC's implementation of TELRIC, costs for OSS should be  
17       based on the technology actually being deployed by BellSouth, not upon technologies that  
18       are—or may become—available but are not deployed. From that standpoint, BellSouth's  
19       cost study rests on an assumption of a forward-looking network configured with  
20       technology actually deployed by BellSouth that is consistent with the FCC's stated  
21       TELRIC methodology. As for Mr. Wood's contention that nothing short of a hypothetical  
22       network configured with technology that BellSouth may never deploy can induce efficient  
23       behavior or produce efficient NRCs, the burden remains on Mr. Wood and ITC^DeltaCom  
24       to demonstrate that such a claim is indeed true. That demonstration must, in addition, pay

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<sup>9</sup> *Id.*

<sup>10</sup> In ¶684 of the Local Competition Order, the FCC considered and rejected embedded costs as another possible measure of cost for a UNE.

<sup>11</sup> Local Competition Order, ¶685. Emphasis added.

<sup>12</sup> *Id.*

1 heed to the FCC's explicit instructions (discussed above) about what to assume in a  
2 TELRIC-estimation exercise.

3 **Q. MR. WOOD SUGGESTS [AT 10] CALCULATING OSS USE COSTS IN A TOTAL**  
4 **NETWORK MANAGEMENT-COMPLIANT NETWORK. IS THAT A GOOD**  
5 **IDEA?**

6 A. No, not as stated. Whatever method is used to supply OSS functions in the future,  
7 consistency requires that we calculate *both* OSS development and OSS use costs *using the*  
8 *same method*. Mr. Wood's suggestion ignores the one-time OSS development costs of  
9 constructing that platform. In light of the economic trade-off between OSS development  
10 costs and OSS use costs, there is danger in such selectivity. As I explained earlier, CLECs  
11 and other OSS-requesting carriers exempted from paying for OSS development costs will  
12 then have an incentive to demand gold-plated OSS. In the process, those CLECs could end  
13 up minimizing their own OSS use costs, without regard to the excessive OSS development  
14 cost burden that would be shifted to BellSouth. Once the OSS development costs are taken  
15 into account, the *total* cost of OSS may be greater than it need be and the burden of  
16 recovering it would fall disproportionately on BellSouth because of that shifting of costs.

17 **Q. DO YOU BELIEVE THAT BELL SOUTH HAS ANY INCENTIVE TO USE NRCs**  
18 **FOR OSS TO RAISE BARRIERS TO ENTRY?**

19 A. No, it would make little or no economic sense for BellSouth to do so. BellSouth  
20 Corporation, the Regional Holding Company of which BellSouth is the local  
21 telecommunications arm, has a keen economic interest in being able to participate in the  
22 interLATA long distance market and to offer competing bundles of local, long distance,  
23 and other services to its customers. With long distance and other carriers allowed entry  
24 into the local exchange market, the borders between local and other markets are being  
25 erased. BellSouth Corporation and other Regional Holding Companies can ill afford to  
26 ignore this market and competitive reality. Therefore, BellSouth Corporation must do what  
27 is required of it by the law of the land (specifically, Sections 271—particularly, the  
28 “competitive checklist”—and 272 of the 1996 Act) to acquire the right to participate in

1 markets from which it is currently barred. As such, a central requirement is that BellSouth  
2 provide non-discriminatory access to its network elements (which, according to the FCC,  
3 include OSS), databases, and other systems that competitors need to provide  
4 telecommunications services. BellSouth must not only provide such access but, once it  
5 gains Section 271 approval, must also remain in compliance with the applicable  
6 requirements (Section 271(d)(6) of the 1996 Act) in order to keep its authority to offer long  
7 distance services. Therefore, any attempt to raise barriers to entry through excessive or  
8 unjustified NRCs for OSS would be completely antithetical to BellSouth's and BellSouth  
9 Corporation's own long-term economic interests. That is why the following statement by  
10 Mr. Wood [at 11] and others like it make absolutely no sense at all:

11 ILECs such as BellSouth have tremendous incentives to delay the  
12 implementation of such systems and to overstate their costs in order to raise the  
13 costs of potential competitors.<sup>13</sup>

14 In any event, BellSouth should hardly be expected to provide access to its OSS without  
15 being able to recover at least the additional cost that is caused by other carriers requesting  
16 such access. For reasons explained earlier, not allowing such recovery would be neither  
17 competitively neutral nor economically efficient.

#### 18 **IV. PERFORMANCE BENCHMARKS AND PENALTIES**

19 **Issue 8(f): Should BellSouth be required to compensate ITC^DeltaCom for breach of**  
20 **material terms of the contract?**

21 **Q. WHAT HAS ITC^DELTACOM PROPOSED FOR ENSURING COMPLIANCE BY**  
22 **BELLSOUTH WITH PERFORMANCE TARGETS EMBODIED IN ITS**  
23 **INTERCONNECTION AGREEMENT WITH BELLSOUTH?**

24 **A.** Even though penalties or liquidated damages are not required by the 1996 Act to ensure  
25 that an ILEC complies with performance standards, ITC^DeltaCom has proposed a "three-  
26 tiered performance guarantee system" that is based on such penalties (Rozycki, at 9;

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<sup>13</sup> Paradoxically, Mr. Wood also recognizes that the opposite is true when he states [at 15, fn. 5]: "Thus, the 1996 Act provides a compensating incentive for BellSouth to open its markets to competition, i.e., in-region, inter-LATA entry."

ITC^DeltaCom Petition, Exhibit A, Attachment 10). This system identifies a set of 45 performance benchmarks, each accompanied by a specific performance guarantee. This set of benchmarks, however, is ITC^DeltaCom's own compilation.

ITC^DeltaCom's proposed performance guarantee system is supposed to work at three levels. At the first level, failure to meet any of the performance benchmarks would, in many instances, trigger refunds by BellSouth of NRCs charged to ITC^DeltaCom. At the second level, as originally proposed, BellSouth's failure to comply with a single performance benchmark for two consecutive months or twice within a quarter would be declared a "Specified Performance Breach" and trigger a payment by BellSouth *directly to ITC^DeltaCom* of \$25,000 per breach. At the third—and most punitive—level, a "Breach of Contract" would be declared upon BellSouth's failure to meet any specific performance benchmark five times within a six-month period. As originally proposed, the penalty for such a breach would be a payment by BellSouth—*again, directly to ITC^DeltaCom*—of \$100,000 per breach. Although Mr. Rozycki [at 10] appears to modify ITC^DeltaCom's original proposal by offering to have BellSouth pay any tier two or three penalties directly to the State, this offer does not cure the problems with the proposed guarantee measures.

**Q. DO YOU AGREE THAT SUCH A PENALTY-BASED SYSTEM IS NECESSARY TO ENSURE BELL SOUTH'S COMPLIANCE AND TO SECURE COMPETITIVE PARITY?**

A. No. As Mr. Varner's testimony explains, enforcement measures based on penalties or liquidated damages are completely unnecessary and inappropriate. Apart from the fact that legal and other remedies are already available, ITC^DeltaCom's proposed performance guarantee system suffers several important problems.

**Q. PLEASE EXPLAIN WHAT THOSE PROBLEMS ARE WITH THE PROPOSED PERFORMANCE GUARANTEE MEASURES.**

A. Mr. Rozycki attempts [at 10] to justify the penalties involved in the ITC^DeltaCom-proposed performance guarantee system by pointing to (1) BellSouth's size and relative (current) market position and (2) BellSouth's ability to afford penalty payments of the

1 magnitude proposed.

2 There are a number of critical defects in Mr. Rozycki's—and ITC^DeltaCom's—  
3 proposal and claims. First, ITC^DeltaCom is unilaterally pushing a set of performance  
4 measures that BellSouth may or may not be able to meet and, therefore, may or may not  
5 agree to in an explicit interconnection agreement. BellSouth has developed a  
6 comprehensive set of service quality measurements ("SQMs") for use in interconnection  
7 agreements generally. It is not feasible for BellSouth to design, negotiate, and implement a  
8 separate set of SQMs for every CLEC that interconnects with it. With CLECs free to  
9 impose their own particular set of performance measures, BellSouth would face the  
10 impossible task of trying to meet those varying standards by, in effect, setting performance  
11 goals and operating—for purposes of interconnection—like several different carriers.

12 Second, a fundamental problem with the proposed system of penalties is that is not tied  
13 to cost or based on economics, so that BellSouth and ITC^DeltaCom would face distorted  
14 incentives to provide quality service on the one hand and to cooperate in jointly  
15 provisioning services for customers on the other. The proposed penalties appear to be set  
16 at the estimated revenue that would be lost if a customer were lost. But, not every service  
17 failure causes the customer to permanently change suppliers and, even if a customer left,  
18 the net cost to ITC^DeltaCom would not be lost revenue but lost profit. Moreover, the  
19 proposed costly penalties and guarantees would take effect irrespective of whether the fault  
20 was BellSouth's, ITC^DeltaCom's, the customer's, or of no one in particular. Even if  
21 rewritten to apply only when fault can be unambiguously ascertained, the measures do not  
22 compare the service BellSouth supplies other CLECs or its own retail customers with the  
23 service it provides ITC^DeltaCom, and the measures do not account for statistical variation  
24 in those measures. As a result, BellSouth could expect to pay penalties even when the  
25 level of service quality it supplies ITC^DeltaCom is the same as that which it supplies to  
26 itself.

27 Finally, as written, the proposed system of penalties assumes that BellSouth's cost to  
28 supply UNEs to ITC^DeltaCom or other CLECs is the same when performance guarantees  
29 are established as when they are not. In fact, the TELRIC of supplying UNEs with

1        draconian performance guarantees and penalties is different from the TELRIC without such  
2        conditions. If ITC^DeltaCom requires a higher grade of service or a higher assurance of  
3        service quality than that which BellSouth supplies to its own retail customers or other  
4        CLECs, it should be obliged to pay for that difference.

5        **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

6        A. Yes.

AFFIDAVIT

STATE OF: MASSACHUSETTS  
COUNTY OF: MIDDLESEX

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared William E. Taylor, Ph.D., Senior Vice President-National Economic Research Associates, Inc., who, being by me first duly sworn depose and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 99-00430 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 19 pages and 0 exhibit(s).

A handwritten signature in black ink, appearing to read 'William E. Taylor', written over a horizontal line.

William E. Taylor

Sworn to and subscribed  
before me this 18th  
day of October, 1999

A handwritten signature in black ink, appearing to read 'Silvia Smith', written over a horizontal line.  
NOTARY PUBLIC